

**REMARKS**

By this Amendment, Applicants have corrected minor informalities in the specification. Examination on the merits is respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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**MARKED-UP VERSION**

**IN THE SPECIFICATION:**

On page 1, please replace paragraphs [0001], [0003], [0004], [0005] with the following:

[0001] [This application is based in part on the following applications filed by one or more of the inventors herein;] This application is a divisional application of U.S. Patent Application Serial No. 10/189,212, filed July 5, 2002, which a divisional application of U.S. Patent Application Serial No 09/573,816, filed May 17, 2000, which is a continuation of U.S. Patent Application Serial No. 09/485,614, filed on February 11, 2000, now U.S. Patent No. 6,266,348, which is a national stage application under 35 U.S.C. § 371 of International Application No. PCT/US98/21442, filed on October 9, 1998, which claims priority to the following Provisional Applications:

[0003] U.S. Provisional Patent Application Serial No. [\*\*\*\*] 60/071,701 filed January 16, 1998 by Richard Gross and Michael Tzannes and entitled "Dual Rate Multicarrier Transmission System in a Splitterless Configuration";

[0004] U.S. Provisional Patent Application Serial No. [\*\*\*\*] 60/072,986 filed January 21, 1998 by Richard Gross, Marcos Tzannes and Michael Tzannes and entitled "Dual Rate Multicarrier Transmission System In A Splitterless Configuration", and

[0005] U.S. Provisional Patent Application Serial No. [\*\*\*\*] 60/072,450 filed January 26, 1998 by Richard Gross, Marcos Tzannes and Michael Tzannes and entitled "Multicarrier System With Dynamic Power Levels".

On page 25 , please replace paragraph [0071] with the following:

[0071] [Figure 9 illustrates] Figures 9A and 9B illustrate the manner in which channel control tables may readily be selected in accordance with the present invention; and

On page 27, please replace paragraph [0077] with the following:

[0077] Referring now to figure 2, a bit allocation table 42 such as is used in the customer premises equipment is shown in further detail. Table 40, used at the central office, is essentially the same in construction and operation and will not further be

described. Table 42 has two sections, a first section, 42a, which defines certain communication parameters such as bit allocation capacity and subchannel gain parameters that characterize the respective subchannels and which the transmitter section of transceiver 34 will use in transmitting a signal to the other transceiver (26) with which it is in communication; and a section 42b that defines the parameters that the receiver section of transceiver 34 will use in receiving a signal transmitted from the other transceiver. Communications take place over a plurality of subchannels, here shown, for purposes of illustration only, as subchannels "9", "10", etc. in the transmitter section, and subchannels "40", "41", etc. in the receiver section. In a full-rate ADSL system, there are up to two hundred and fifty six such subchannels, each of bandwidth 4.1 kHz. For example, in one embodiment of the [inventin] invention, upstream communications (i.e., from the customer premises to the central telephone office) are conducted on subchannels 8 to 29; downstream communications (from the central office to the customer premises) are conducted on subchannels 32 to 255; subchannels 30 and 31 form a guard band between upstream and downstream communications that may be used for signaling as described hereinafter.

On page 29, please replace paragraph [0082] with the following:

**[0082]** In figure 5A, the primary channel control table 45 has a transmitter section 45a which stores a primary set of channel control parameters for use in transmitting to a remote receiver over a DSL line; and a receiver section 45b which stores a primary set of channel control parameters for use in receiving communications over a DSL line from a remote transmitter. The subchannels to which the parameters apply are shown in column 45 c. The channel control parameters in the transmitter section 45a include at least a specification of the bit allocations ("B") 45d and preferably also the gains ("G") 45e to be used on the respective subchannels during transmission. The receiver section similarly includes specification of the bit allocations and gains, and preferably also includes specification of the frequency domain equalizer coefficients ("FDQ") 45f, time domain equalizer coefficients [("TDEQ")] ("TDQ") 45g, and echo canceller coefficients [("FED")] ("EC") 45h, among others.